FORM 4-1

International Business Machines Corporation ASSIGNEE NAME:

Armonk, New York ASSIGNEE RESIDENCE:

GB9-2000-0097- US1 Practitioner's Docket No.

PATENT

Preliminary Classification:

Proposed Class:

Subclass:

NOTE: "All applicants are requested to include a preliminary classification on newly filed patent applications. The preliminary classification, preferably class and subclass designations, should be identified in the upper right-hand comer of the letter of transmittal accompanying the application papers, for example 'Proposed Class 2, subclass 129.' " M.P.E.P. § 601, 7th ed.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application Assistant Commissioner for Patents Washington, D.C. 20231

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

McGuire, Richard K., Webster, Matthew A., Slattery, Edward J. Inventor(s):

WARNING: 37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

"(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title):

SYSTEM AND METHOD FOR CLASS LOADER CONSTRAINT CHECKING

CERTIFICATION UNDER 37 C.F.R. § 1.10*

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service on this date _______December as "Express Mail Post Office to Addressee," mailing Label Number ______EK586 2000 in an envelope 098 US dressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

Juliet Gresham-Moran

(type or print name of person mailing paper)

Signature of person mailing paper

WARNING: Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. § 1.8 cannot be used to obtain a date of mailing or transmission for this correspondence.

*WARNING: Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label placed thereon prior to mailing. 37 C.F.R. § 1.10(b).

"Since the filing of correspondence under § 1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

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This new application is for a(n)
check one applicable item below)
Original (nonprovisional)
☐ Design ·
☐ Plant
WARNING: Do not use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C. § 371(c)(4), unless the International Application is being filed as a divisional, continuation or continuation-in-part application.
WARNING: Do not use this transmittal for the filing of a provisional application.
NOTE: If one of the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT APPLICATION OF THE FILING OF THIS CONTINUATION APPLICATION.
☐ Divisional.
☐ Continuation.
☐ Continuation-in-part (C-I-P).

2. Benefit of Prior U.S. Application(s) (35 U.S.C. §§ 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. § 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
 - (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(f) within the time period set forth in § 1.53(f).

37 C.F.R. § 1.78(a)(1).

Type of Application

NOTE: If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. §§ 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. §§ 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. §§ 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.

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WARI	NING:	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday within the District of Columbia, any nonprovisional application claiming benefit of the provisional application must be filed prior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
		The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.
3. Pa	pers	Enclosed
		uired for filing date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 gn) Application
4.7.	_ Pa	ges of specification
_5	_ Pa	ges of claims
_ 9	_ Sh	eets of drawing
WAR	VING:	DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a patent application. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny paper and meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made to the original drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only one copy is required or desired. For comments on proposed then-new 37 C.F.R. § 1.84, see Notice of March 9, 1988 (1990 O.G. 57-62).
NOTE.	inve the on	entifying indicia, if provided, should include the application number or the title of the invention, entor's name, docket number (if any), and the name and telephone number of a person to call if Office is unable to match the drawings to the proper application. This information should be placed the back of each sheet of drawing a minimum distance of 1.5 cm. (5/8 inch) down from the top he page " 37 C.F.R. § 1.84(c)).
		(complete the following, if applicable)
1	6	The enclosed drawing(s) are photograph(s), and there is also attached a PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b).
1	<u></u> f	ormal
• 1	į (X	nformal
B. (Othe	r Papers Enclosed
-		ges of declaration and power of attorney
<u>1</u>	_ Pag	ges of abstract
	_ Oth	er
4. Ad	ditio	nal papers enclosed
[□ <i>f</i>	Amendment to claims
		Cancel in this applications claims before calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)
		Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)
[_ F	Preliminary Amendment
(nformation Disclosure Statement (37 C.F.R. § 1.98)
(] F	form PTO-1449 (PTO/SB/08A and 08B)
٢		Citations

] De	claration of Biological Deposit				
	per	Submission of "Sequence Listing," computer readable corporad/or amendment pertaining the for biotechnology invention containing ucleotide and/or amino acid sequence.				
		Authorization of Attorney(s) to Accept and Follow Instructions from Representative				
] Sp	pecial Comments				
] Oth	ner				
5. Dec	laratio	on or oath (including power of attorney)				
NOTE:	the pri by all a applica the sig by a st being declara person	ly executed declaration is not required in a continuation or divisional application provided that or nonprovisional application contained a declaration as required, the application being filed is or fewer than all the inventors named in the prior application, there is no new matter in the ation being filed, and a copy of the executed declaration filed in the prior application (showing nature or an indication thereon that it was signed) is submitted. The copy must be accompanied attement requesting deletion of the names of person(s) who are not inventors of the application filed. If the declaration in the prior application was filed under § 1.47, then a copy of that ation must be filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning under § 1.47 has subsequently joined in a prior application, then a copy of the subsequently ed declaration must be filed. See 37 C.F.R. §§ 1.63(d)(1)–(3).				
NOTE:	is direct abbrev country	aration filed to complete an application must be executed, identify the specification to which it sted, identify each inventor by full name including family name and at least one given name, without itation together with any other given name or initial, and the residence, post office address and y or citizenship of each inventor, and state whether the inventor is a sole or joint inventor. 37 § 1.63(a)(1)–(4).				
NOTE:	as pres as pres is that this pa	eventorship of a nonprovisional application is that inventorship set forth in the oath or declaration scribed by § 1.62, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration scribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under tragraph accompanied by the fee set forth in § 1.17(i) is filed supplying or changing the name also of the inventor or inventors." 37 C.F.R. § 1.41(a)(1).				
X] End	closed				
	Exe	ecuted by				
		(check all applicable boxes)				
		inventor(s).				
		legal representative of inventor(s). 37 C.F.R. §§ 1.42 or 1.43.				
		joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.				
		☐ This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.				
] No	t Enclosed.				
NOTE:	the U.S	the filing is a completion in the U.S. of an International Application or where the completion of S. application contains subject matter in addition to the International Application, the application is treated as a continuation or continuation-in-part, as the case may be, utilizing ADDED PAGE IEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION CLAIMED.				
	Ď	Application is made by a person authorized under 37 C.F.R. § 1.41(c) on behalf of all the above named inventor(s).				
		(New Application Transmittal [4-1]—page 4 of 11)				

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(The decla	ration or oath, along with the surcharge required by 37 C.F.R. § 1.16(e) can be filed subsequently).
	☐ Showing that the filing is authorized. (not required unless called into question. 37 C.F.R. § 1.41(d))
6. Inventors	hip Statement
o	the named inventors are each not the inventors of all the claims an explanation, including the wnership of the various claims at the time the last claimed invention was made, should be ubmitted.
The invento	rship for all the claims in this application are:
	e same.
	or
	t the same. An explanation, including the ownership of the various claims at time the last claimed invention was made,
	is submitted.
	will be submitted.
7. Language	;
An Eng require	plication including a signed oath or declaration may be filed in a language other than English. glish translation of the non-English language application and the processing fee of \$130.00 of by 37 C.F.R. § 1.17(k) is required to be filed with the application, or within such time as may by the Office. 37 C.F.R. § 1.52(d).
Eng	glish
□ No	n-English
	The attached translation includes a statement that the translation is accurate. 37 C.F.R. § 1.52(d).
8. Assignme	nt
☐ An	assignment of the invention to
	is attached. A separate ☐ "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or ☐ FORM PTO 1595 is also attached.
K	will follow.
NOTE: "If an a and on	ssignment is submitted with a new application, send two separate letters-one for the application e for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).
	newly executed "CERTIFICATE UNDER 37 C.F.R. § 3.73(b)" must be filed when a continuation-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.

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Country	Appln. No.		` Filed
Country	Appin. No.	!	Filed
Country	Appln. No.		Filed
rom which priority is clain	ned		
is (are) attached	i.		
. will follow.			
NOTE: The foreign application declaration. 37 C.F.R.	forming the basis for the claim § 1.55(a) and 1.63.	for priority must	be referred to in the oath o
U.S. application or Inte § 120 is itself entitled to PAGES FOR NEW API CLAIMED.	reign priority for which the applic mational Application from which to to priority from a prior foreign app PLICATION TRANSMITTAL WHER	this application cl lication, then com	aims benefit under 35 U.S.C aplete item 18 on the ADDED
10. Fee Calculation (37			
A. 🖺 Regular applica	tion		
	CLAIMS AS FILEI	D	
Number filed	Number Extra	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$ 090:30 -7Î0.4
Fotal Claims (37 C.F.R. § 1.16(c))	- 20 = ⁰ ×	× \$ 18.00	0.00
ndependent Claims (37 C.F.R. § 1.16(b))	- 3 = ₀ ×	80.00 x \$ 78.00	- 0.00
Multiple dependent claim(s if any (37 C.F.R. § 1.16(c		\$260.00	0.00
☐ Amendment car	ncelling extra claims is end	closed.	
	eting multiple_dependencie	es is enclosed	i.
☐ Amendment del	etting multiple-dependence		
	aims is not being paid at	this time.	
Fee for extra cl.	aims is not being paid at ansare not paid on filing they must of the time period set for respons	be paid or the clai	ims cancelled by amendment and Trademark Office in an
Fee for extra cl. NOTE: If the fees for extra clair prior to the expiration	aims is not being paid at ansare not paid on filing they must of the time period set for respons	be paid or the clai	ims cancelled by amendment and Trademark Office in any
Fee for extra cl. NOTE: If the fees for extra clair prior to the expiration	aims is not being paid at an are not paid on filing they must not the time period set for response, 37 C.F.R. § 1.16(d). Filing Fee Calculation ion	be paid or the clai	and Trademark Office in an

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C.		Plant application (\$480.00—37 C.F.R. § 1.16(g))
	O	, g
11.	_	il Entity Statement(s)
		Statement(s) that this is a filing by a small entity under 37 C.F.R. § 1.9 and 1.27 is (are) attached.
WAI	RNING	"Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. § 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent of the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).
WAF	RNING	
		(complete the following, if applicable)
		Status as a small entity was claimed in prior application
		, filed on, from which benefit
		is being claimed for this application under:
		35 U.S.C. § 🔲 119(e),
		☐ 120, · · · · · · · · · · · · · · · · · · ·
		□ 121, □ 365(c),
		and which status as a small entity is still proper and desired.
		☐ A copy of the statement in the prior application is included.
		Filing Fee Calculation (50% of A, B or C above)
		\$
NOT	ar	ny excess of the full fee paid will be refunded if small entitiy status is established and a refund request e filed within 2 months of the date of timely payment of a full fee. The two-month period is not stendable under § 1.136. 37 C.F.R. § 1.28(a).
12.	Requ	est for International-Type Search (37 C.F.R. § 1.104(d))
		(complete, if applicable)
		Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

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3. Fee	Payr	nent Being Made at This Time	_			
	Not	Enclose				
		No filing see is to be paid at this time. (This and the surcharge required by 37 C.F.R. subsequently.)	Ş 1.	16(e)	can be	paid
X	Enc	losed				
	X	Filing fee		\$	710.00	
		Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION".)		\$		
		Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))		\$		
		For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))		\$.		
		Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))		\$.		
		Fee for international-type search report (\$40.00; 37 C.F.R. § 1.21(e))		\$.		
fa 3 ea	ailing to 7 C.F.I ither th	R. § 1.21(I) establishes a fee for processing and retaining any applic to complete the application pursuant to 37 C.F.R. § 1.53(f) and thi R. §§ 1.53 and 1.78(a)(1), indicate that in order to obtain the benefie basic filing fee must be paid, or the processing and retention for year from notification under § 53(f).	s, as fit of	well a: a prior	s the chang U.S. applic (I) must be	es to ation,
		Total fees enclosed	\$_		710.00	
4. Meti	nod c	of Payment of Fees				
	Che	ck in the amount of \$				
Ž	\$_7	rge Account No. <u>DA12-2158</u> 10.00	in	the	amount	of
		ould be itemized in such a manner that it is clear for which purpose	the	fees an	e paid. 37 C	C.F.R.

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15. Authorization to Charge Additional Fees

WARNING: If no fees are to be paid on filing, the following items should not be completed.

WARNING: Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim charges are authorized.

- The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. DA12-2158 .
 - 27 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
 - 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)

NOTE: Because additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be paid or these claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any notice of fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, except possibly when dealing with amendments after final action.

- 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- 37 C.F.R. § 1.17(a)(1)–(5) (extension fees pursuant to § 1.136(a)).

NOTE: ". . A written request may be submitted in an application that is an authorization to treat any concurrent or future reply, requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

- ☐ 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))
- NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b).
- NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . . the issue fee. . . " From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

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16.	Instructions	as	to	Overpayment

NOTE: ". . . Amounts of type five dollars or less will not be returned unless sincically requested within a reasonable time, it is the payer be notified of such amounts; amounts wenty-five dollars may be returned by check or, if requested, by credit to a deposit account." 37 C.F.R. § 1.26(a).

Credit Account No. DA12-2158

□ Refund

Reg. No. 34,360

Tel. No. (617) 693-4152

Customer No. 27085

PATENT .TRADEMARK OFFICE

SIGNATURE OF PRACTITIONER

Stephen T. Keohane

(type or print name of attorney)

Lotus Development Corporation

P.O. Address

55 Cambridge Parkway Cambridge, MA 02142

(New Application Transmittal [4-1]-page 10 of 11)

L	Incor	poration by reference of added pages
	pi st th	heck the following item if the application in this transmittal claims the benefit of fior U.S. application(s) (including an international application entering the U.S. age as a continuation, divisional or C-I-P application) and complete and attach e ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF RIOR U.S. APPLICATION(S) CLAIMED)
		Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed
		Number of pages added
		Plus Added Pages for Papers Referred to in Item 4 Above
		Number of pages added
		Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer inventor(s) of the subject matter claimed in this application.
		Number of pages added
		Plus "Assignment Cover Letter Accompanying New Application"
		Number of pages added
	State	ment Where No Further Pages Added
		no further pages form a part of this Transmittal, then end this Transmittal with is page and check the following item)
	X	This transmittal ends with this page.